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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,924	04/12/2004	Yat Keung William Yuen	016660-216	2122

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EXAMINER

VU, QUYNH-NHU HOANG

ART UNIT	PAPER NUMBER
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3763

NOTIFICATION DATE	DELIVERY MODE
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04/04/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

Office Action Summary	Application No.	Applicant(s)	
	10/821,924	YUEN, YAT KEUNG WILLIAM	
	Examiner	Art Unit	
	QUYNH-NHU H. VU	3763	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16, 18-56 and 58 is/are rejected.
- 7) ☒ Claim(s) 17 and 57 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/12/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the **“the closure member is at second position in which said the first opening is open”** of claim 1 must be shown or the feature(s) canceled from the claim(s). According the Specification, it only shows that **“the closure member 66 closes the first opening 68” (Figs. 3 and 10)**.

No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 46-49 recite the limitation "said ring-shaped structure". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Morifuki (US 4,883,464).

Morifuki discloses an electric breast pump including: one hood member 14; a chamber adapted to be in fluid communication with the hood member via a first valve 8; a first motor (3, 11) operatively associated with a pumping member with is movable to draw air from the hood member into the chamber via the first valve (col. 2 line 26+); the chamber having at least a first opening (16 or the opening when valve 8 opened) and a closure member 9 operatively associated with the motor; wherein the closure member is movable between the first position (when closure member/diaphragm 9 vibrates to the left) to close the first opening (closing the valve 8) and a second position (when closure member/diaphragm 9 vibrates to the right) in which the first opening is open (opening the valve 8) (see col. 2, lines 51-63); a second valve

Claims 1-2, 4-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Uehara et al. (US 5,947,923).

Uehara discloses an electric breast pump including hood member 11; a chamber; a first motor 24; the chamber having at least a first opening (15b Figs. 2, 9-13); and a closure member (valve 15a); wherein the closure member is movable between a first position to close the first opening 15a (Figs. 9-11) and a second position in which the first opening is open (Fig. 13, col. 6, lines 23-32); wherein the closure

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member is at the first position when the first motor is in operation (Figs. 9-11) and is at the second position when the first motor is not in operation (Fig. 13); a ring-shaped structure 14b (Fig. 5).

Claims 30-32, 36, 38-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Atkin et al. (US 2005/0101908).

Atkin discloses an electric breast pump including at least one hood member; a sensing unit IR (Fig. 9, para [0046-0050]); data processing unit 56; a motor.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10-12, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uehara in view of Schlensog et al. (US 4,673,388).

Uehara discloses the invention substantially as claimed. Uehara fails to disclose the chamber includes a second opening closable by a second valve; fourth valve in fluid communication with the hood member.

Schlensog discloses a second valve opening closable by a second valve (254 or 281), a fourth valve 29 in the fluid communicating with the hood member 10.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the device of Uehara with second and fourth valve, as taught by Schlensog, in order to remain under low pressure and reduces the air volume to be pumped off.

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Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uehara in view of Greter et al. (US 6,547,756) or Morifuji (US 4,886,494).

Uehara discloses the invention substantially as claimed. Uehara further discloses an adjustment member 28 includes a wheel knob 282 operable to adjust the amount of air allowed to enter the valve (Figs 6-7, col. 4, line 25-col. 5, line 55). Uehara does not clearly disclose the adjustment member is manually.

Greter discloses that the adjustment member manually includes a wheel member (rotary knob) (col. 4, line 5-14).

Morifuji discloses that the adjustment member manually includes a wheel member (knob 17) and including a valve member 14. (col. 3, line 13-col.4, line 19)

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the device of Uehara with a manually adjustment member, as taught by Greter or Morifuji, for adjusting the suction level as well as rate within a sequence. Furthermore, it would have been obvious to one of ordinary skill in the breast pump art to provide an adjustment member manually in device of Uehara, in order to gain the commonly understood such as the device capable to operative without an electric power source, enabling it to be readily transported and used anywhere.

Claims 19-21, 25, 28-29 are rejected under 35 U.S.C. 102(b) as being unpatentable over Uehara in view of Atkin et al. (US 2005/0101908).

Uehara discloses the invention substantially as claimed. Uehara fails to disclose the device including a sensing unit.

Atkin discloses an electric breast pump including a sensing unit IR (Fig. 9, para [0046-0050]); data processing unit 56.

Since the marketplace reflects the reality that applying the sensing or programming device to older mechanical device is common place. It would have been obvious at to one of ordinary skill in the breast pump art to update or enhance the old device such as shown in Uehara with sensing unit that are

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commonly available and commonly understood benefits of such adaptation, such as power-assisted breast pump.

Claims 22-24, 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atkin et al. (US 2005/0101908).

Atkin /Uehara in view of Atkin, discloses the invention substantially as claimed. Atkin or Uehara in view of Atkin fail to disclose that including a second sensing unit. I would have been obvious to one having ordinary skill in the art at the time the invention was made to provide more than one sensing unit, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art and for intended use.

Claims 26-29, 37-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atkin in view of Greter et la. (US 6,547,756)

Uehara in view of Atkin / or Atkin discloses the invention substantially as claimed. Uehara in view of Atkin / or Atkins further discloses a suction level control signal (see claim 1), or suction stroke velocity (para 0046). In other words, flow rate of milk level is control by control signal. For example, when the suction level is high, the flow rate of milk is fast, and when the suction level is low, the flow rate of is slow. Atkin fails to disclose that a display for visually indicating the general rate of flow of milk into the breast pump.

Greter disclose a LCD display 48 provides visual indication of various function of the pump. For example, the type of sequence then programmed, the level of suction force, the battery condition and so forth. Therefore, it can be indicated for rate of flow of milk also.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the device of Atkin with a visually indicating, as taught by Greter, in order to gain the commonly understood benefits of such adaptation, such as for visually indicating the flow rate of milk into the breast pump.

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Claims 41-52, 58 are rejected under 35 U.S.C. 103(a) as being anticipated by Atkin et al. in view of Morifuki or Uehara.

Since claims 41-52 and 58 are similar to claims 1-12 and 18. Please see the rejection above.

Claims 53-56 are rejected under 35 U.S.C. 103(a) as being anticipated by Atkin et al. in view of Uehara and further in view of Greter or Morifuji

Since claims 53-56 are similar to claims 13-16. Please see the rejection above.

Claims 46-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atkin et al. in view of in view of Greter and further in view of Uehara.

Atkin in view of Greter do not specifically disclose ring shaped structure as describe in claims 46-49.

Uehara discloses a ring shaped structure 14c, 14b, 25 (Fig. 5) is movable between a first configuration to a second configuration; wherein the ring shaped structure rotates when the motor is in operation.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the device of Atkin in view of Greter with a ring shaped structure, as taught by Uehara, in order to reducing a rotational power of the driving mean and a linkage for converting rotational movements of the driving means into reciprocating movements.

Allowable Subject Matter

Claim 17 and 57 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quynh-Nhu H. Vu whose telephone number is 571-272-3228. The examiner can normally be reached on 6:00 am to 3:00 pm.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nicholas D Lucchesi/
Supervisory Patent Examiner, Art Unit 3763

Quynh-Nhu H. Vu
Examiner
Art Unit 3763